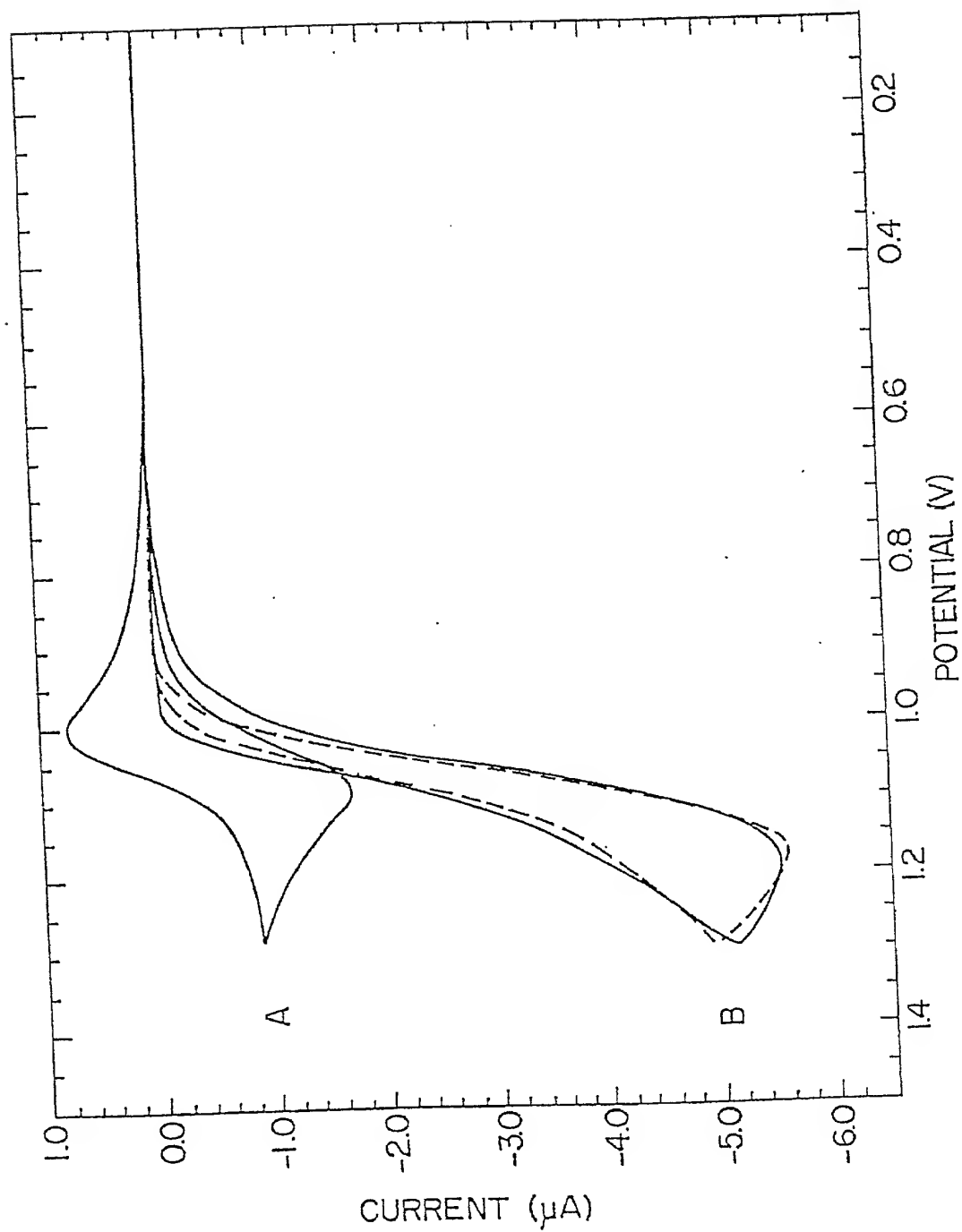


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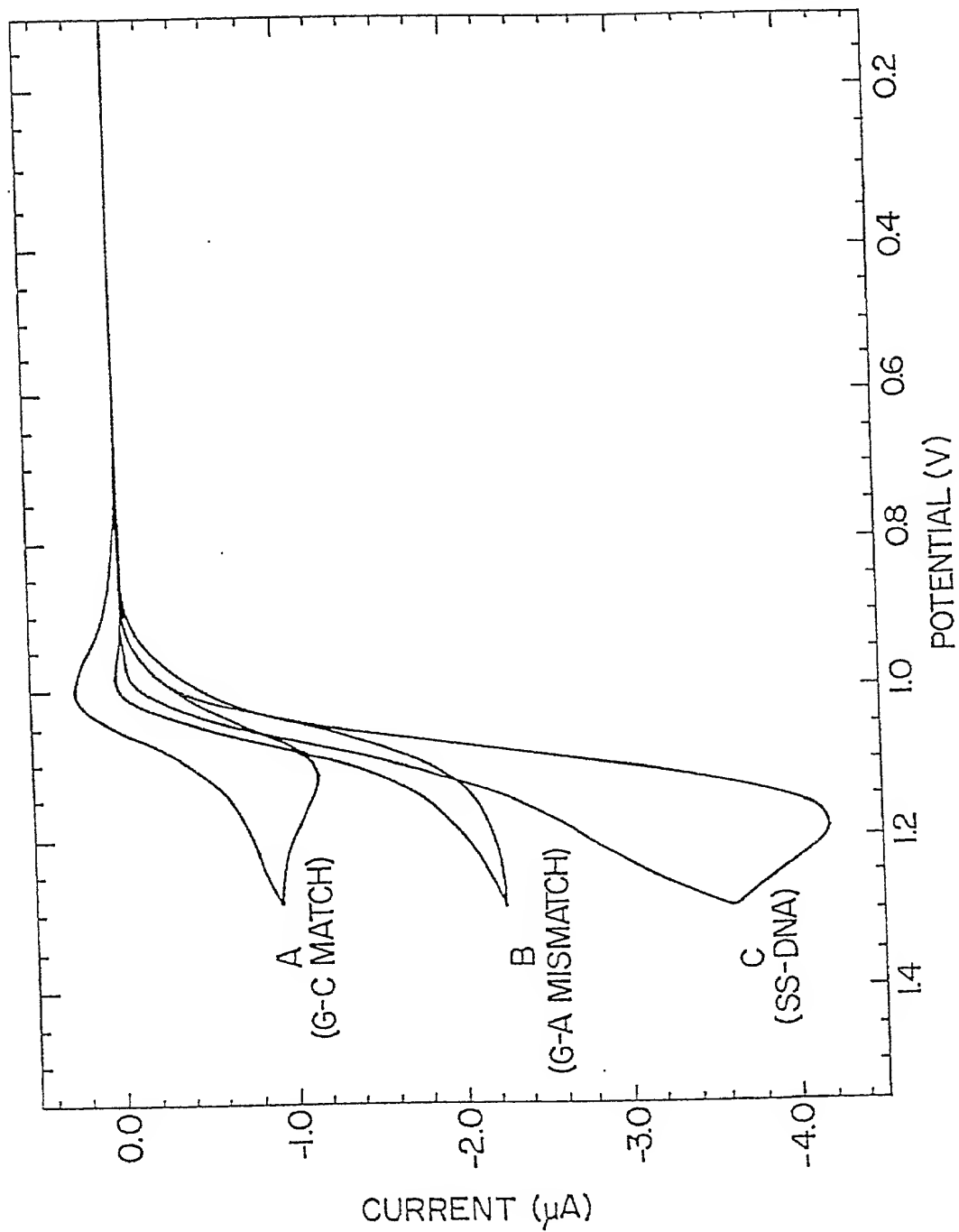


FIG. 2.

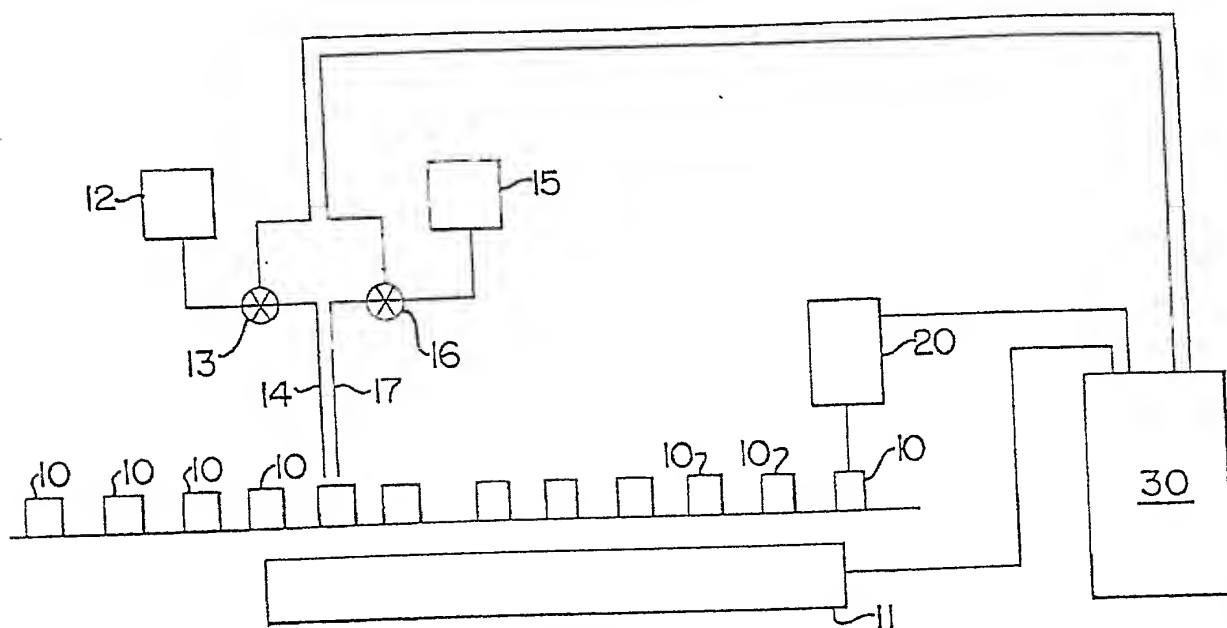
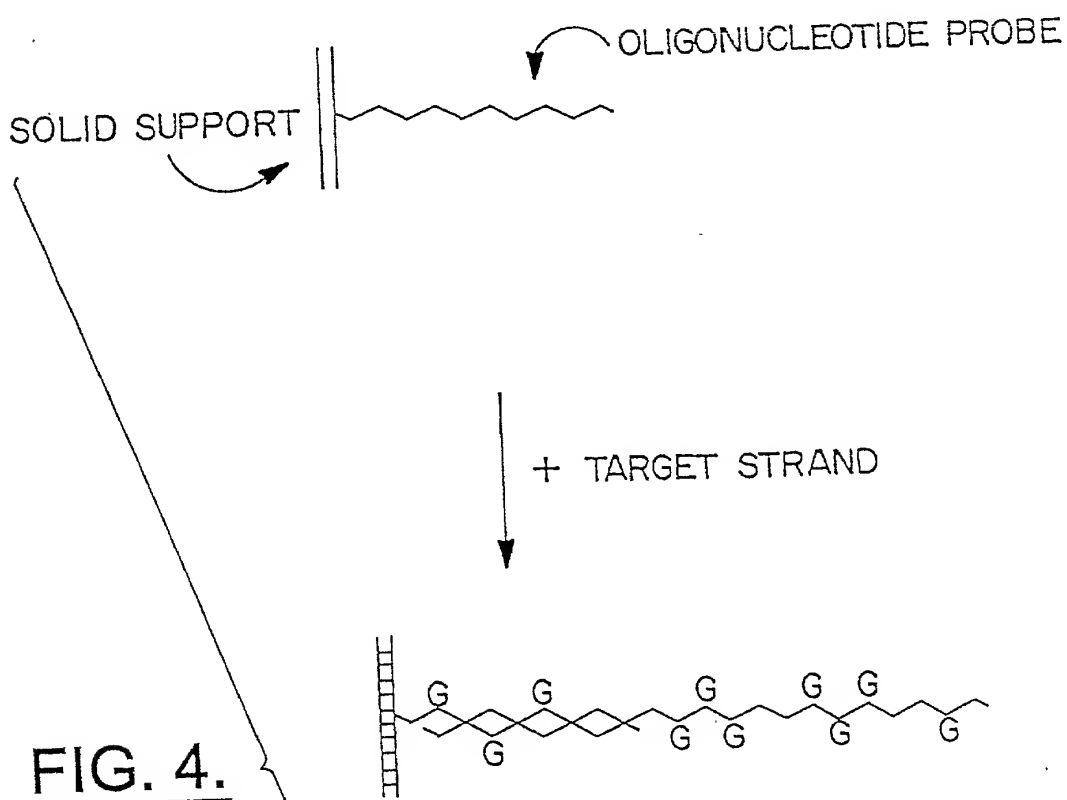


FIG. 3.



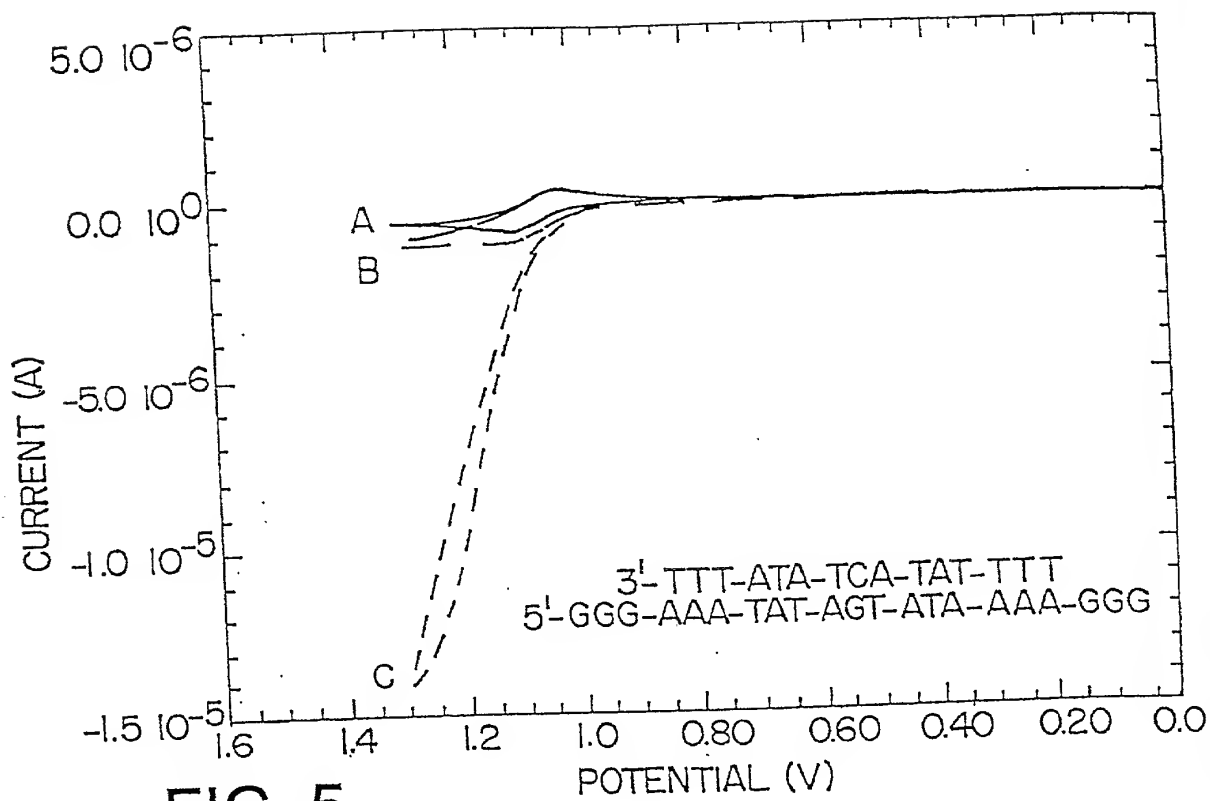


FIG. 5.

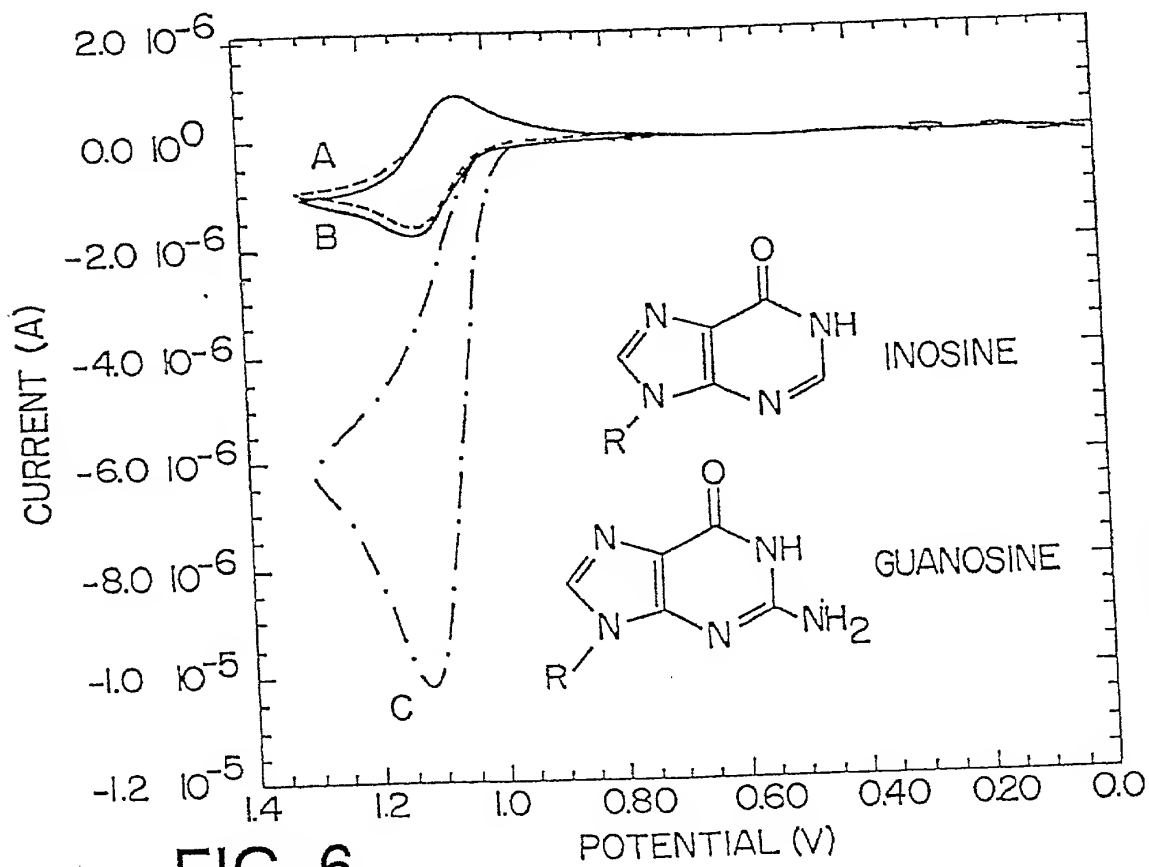
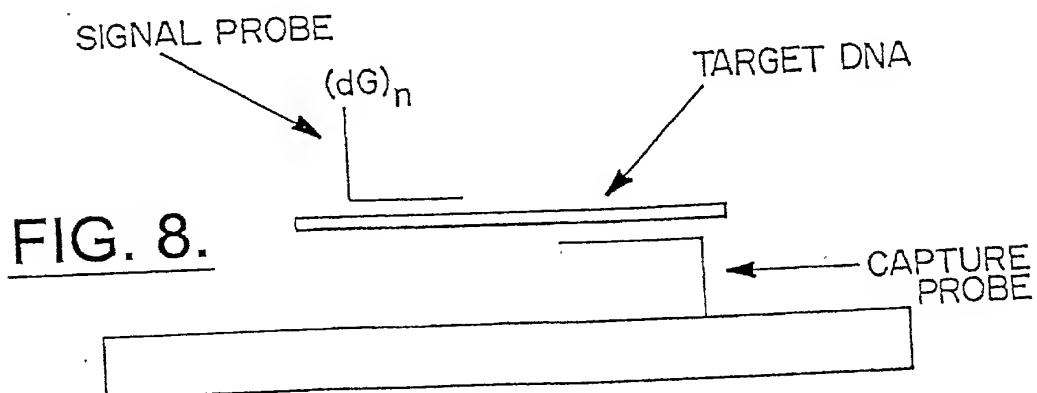
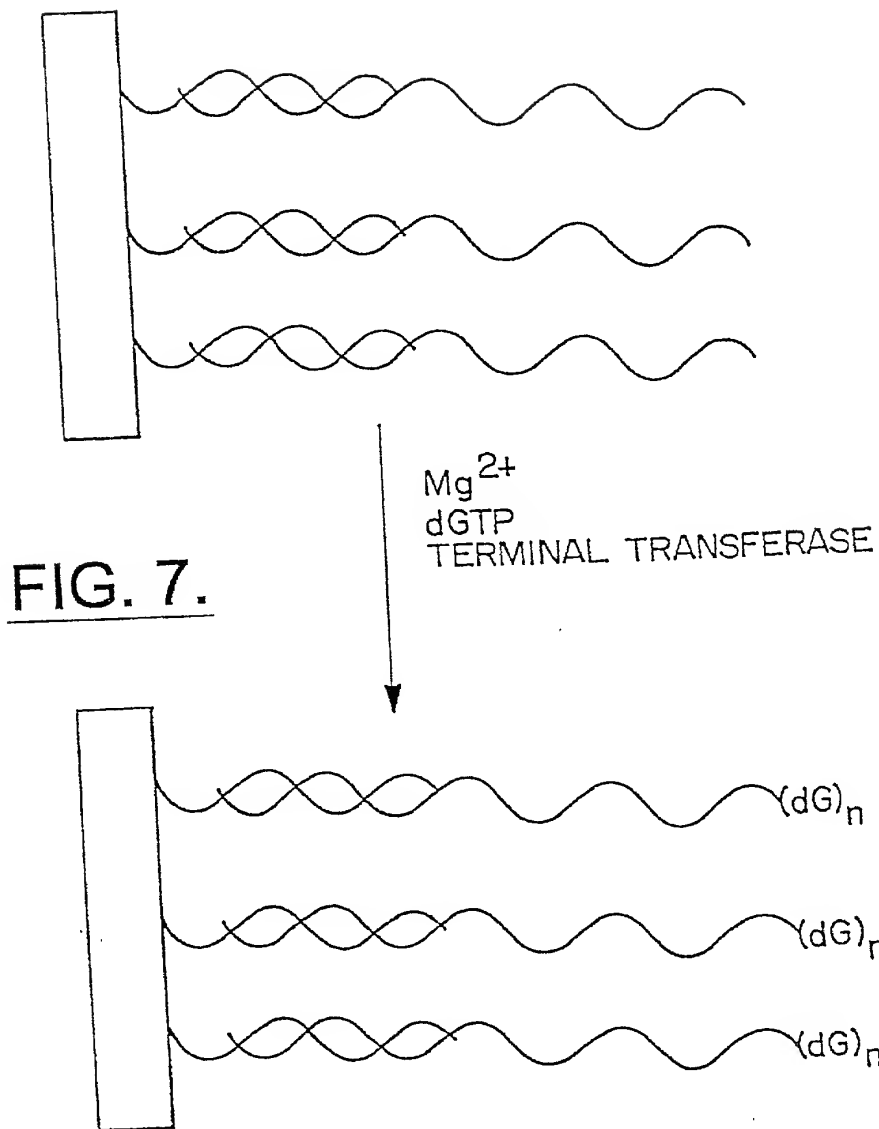
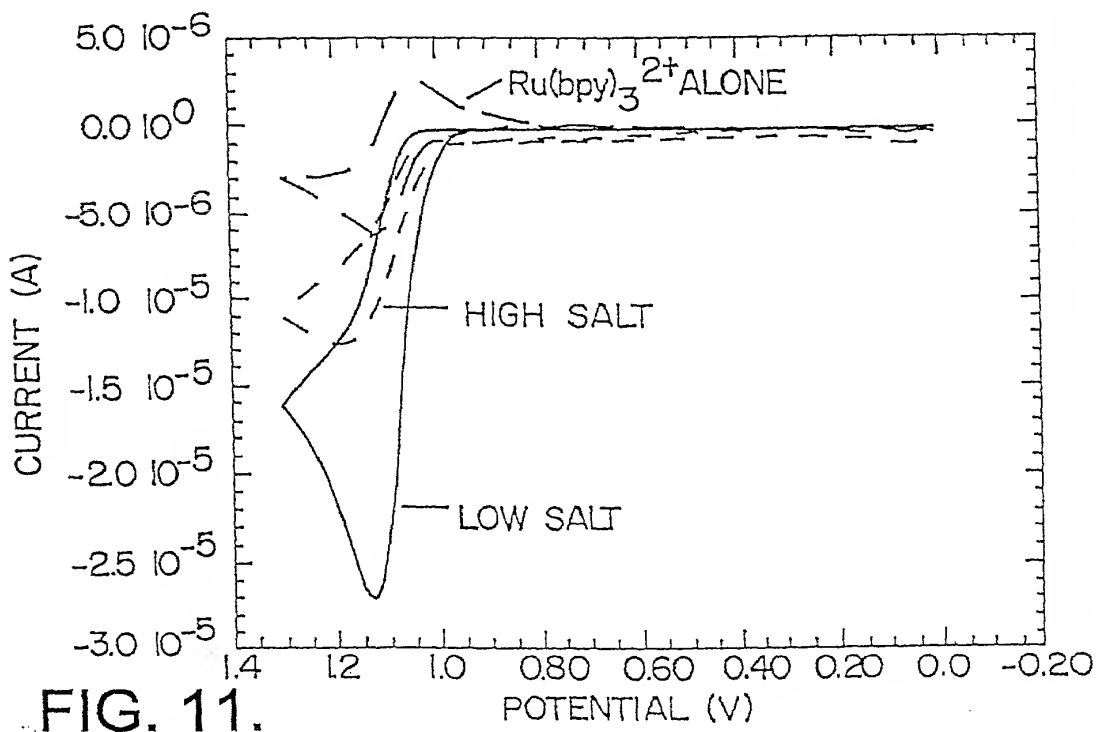
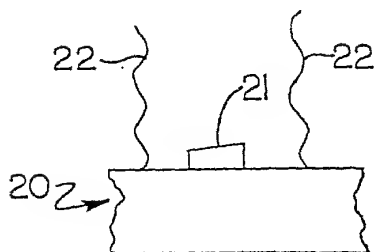
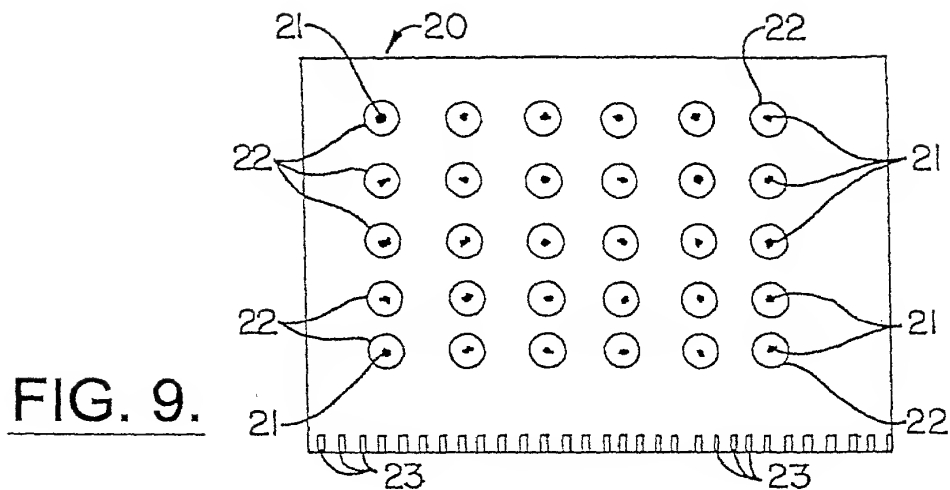


FIG. 6.





A cyclic voltammogram showing the electrochemical behavior of Os(bpy)_3^{2+} alone and in the presence of DNA. The y-axis is labeled 'CURRENT (A)' and ranges from -6.0×10^{-6} to 4.0×10^{-6} . The x-axis is labeled 'POTENTIAL (V)' and ranges from 1.4 to -0.20. Two curves are shown: a solid line for Os(bpy)_3^{2+} ALONE and a dashed line for Os(bpy)_3^{2+} + DNA. The solid line shows a reversible redox couple with an anodic peak at approximately 0.65 V and a cathodic peak at approximately 0.70 V. The dashed line shows a similar couple but with a significantly larger cathodic peak at approximately 0.70 V and a smaller anodic peak at approximately 0.65 V, indicating a more irreversible process.

A cyclic voltammogram showing current (A) versus potential (V). The y-axis is labeled 'CURRENT (A)' and ranges from -1.0×10^{-5} to 1.0×10^{-5} with major ticks at 1.0×10^{-5} , 5.0×10^{-6} , 0.0×10^0 , -5.0×10^{-6} , and -1.0×10^{-5} . The x-axis is labeled 'POTENTIAL (V)' and ranges from 1.4 to -0.20 with major ticks at 1.4, 1.2, 1.0, 0.80, 0.60, 0.40, 0.20, 0.0, and -0.20. Two curves are shown: a solid line labeled 'Os(bpy)₃²⁺ + DNA' and a dashed line labeled 'Os(bpy)₃²⁺ ALONE'. Both curves show a reversible redox couple with an anodic peak at approximately 0.7 V and a cathodic peak at approximately 0.7 V. The peak currents are significantly higher for the 'Os(bpy)₃²⁺ ALONE' curve compared to the 'Os(bpy)₃²⁺ + DNA' curve, indicating a decrease in electroactive surface area upon DNA binding.

FIG. 12B.

A cyclic voltammogram showing the electrochemical behavior of $\text{Ru}(\text{bpy})_3^{2+}$ alone and in the presence of high and low salt concentrations. The x-axis represents Potential (V) from 1.4 to -0.20. The y-axis represents Current (A) from -2.5×10^{-5} to 5.0×10^{-6} . The plot shows three curves: a dashed line for $\text{Ru}(\text{bpy})_3^{2+}$ ALONE, a solid line for HIGH SALT, and a solid line for LOW SALT. The LOW SALT curve shows a large cathodic peak at approximately 1.15 V, while the HIGH SALT and ALONE curves show much smaller peaks.

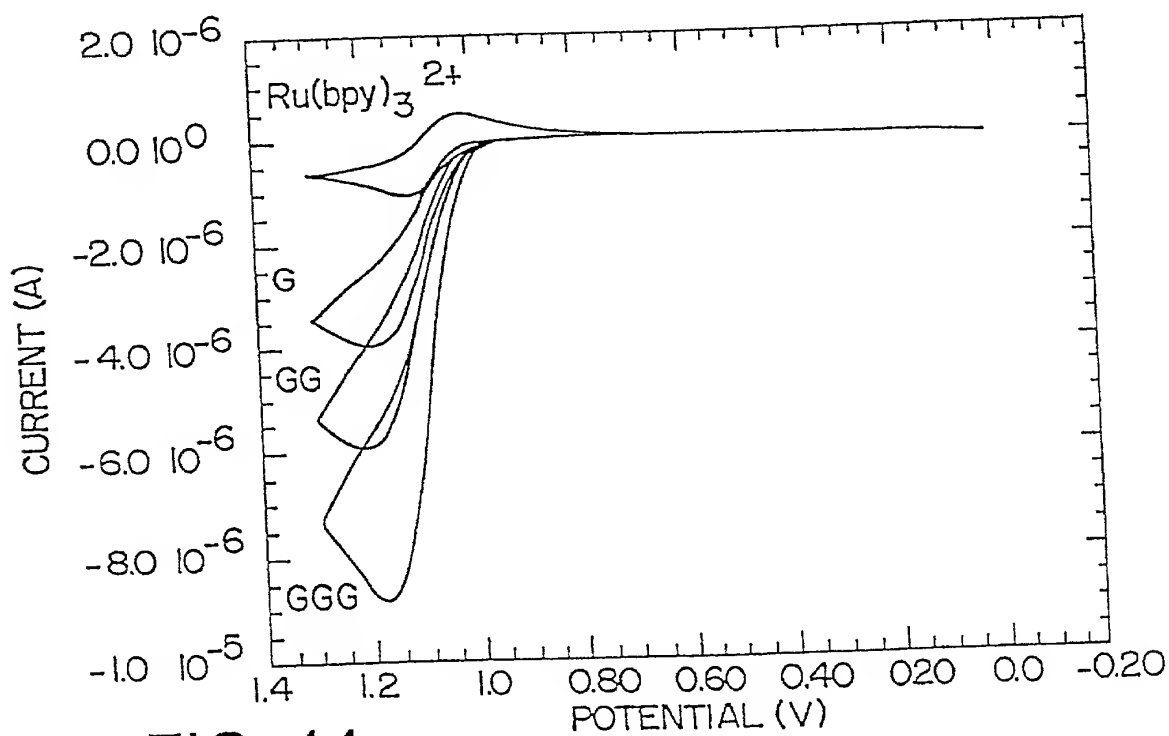


FIG. 14.

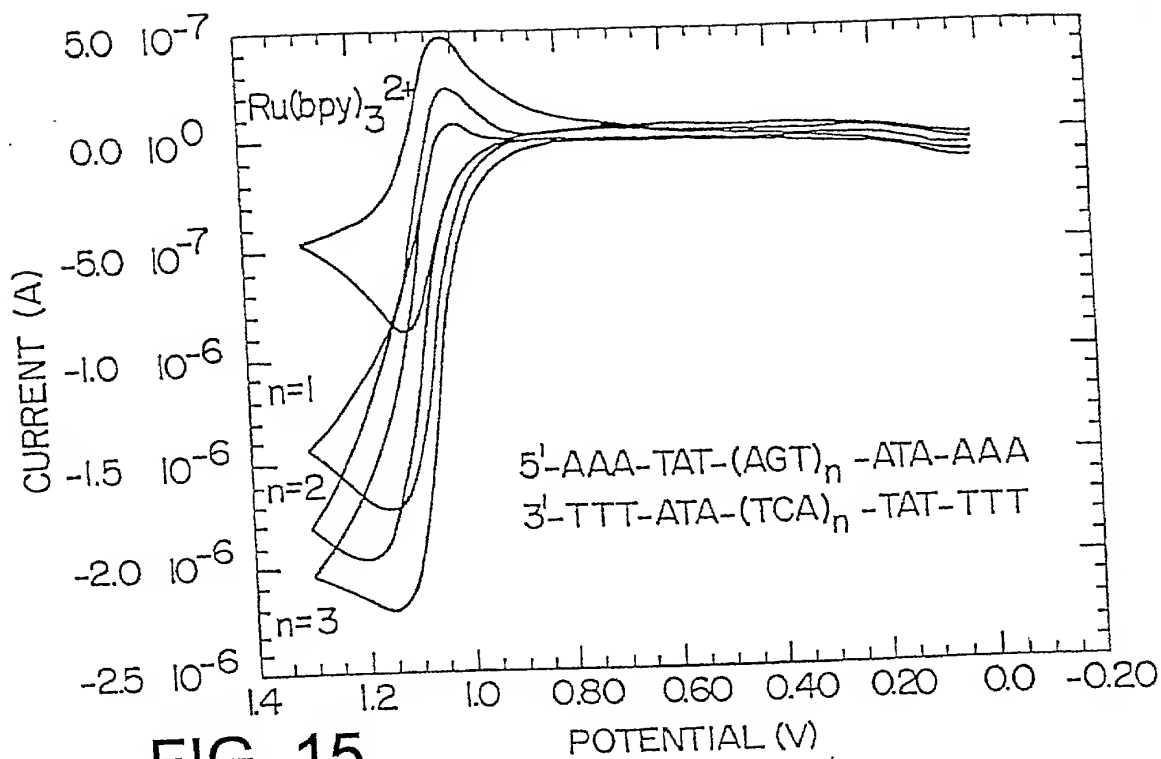


FIG. 15.

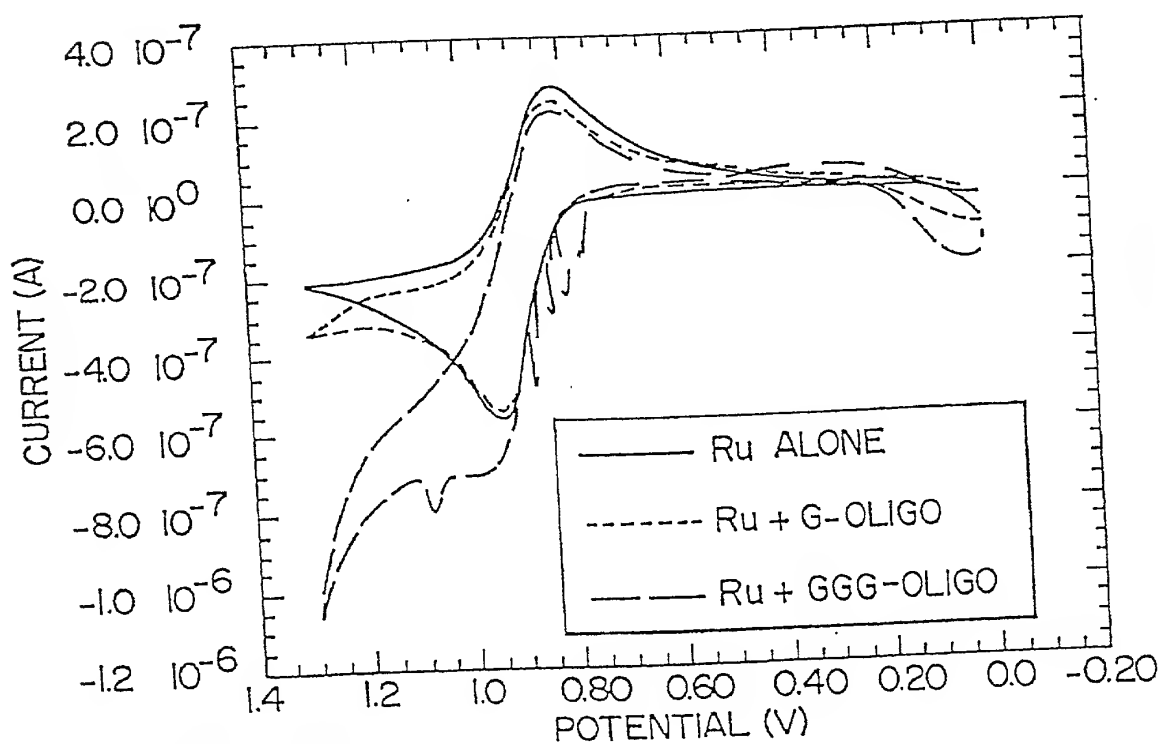


FIG. 16.

FIG. 18.

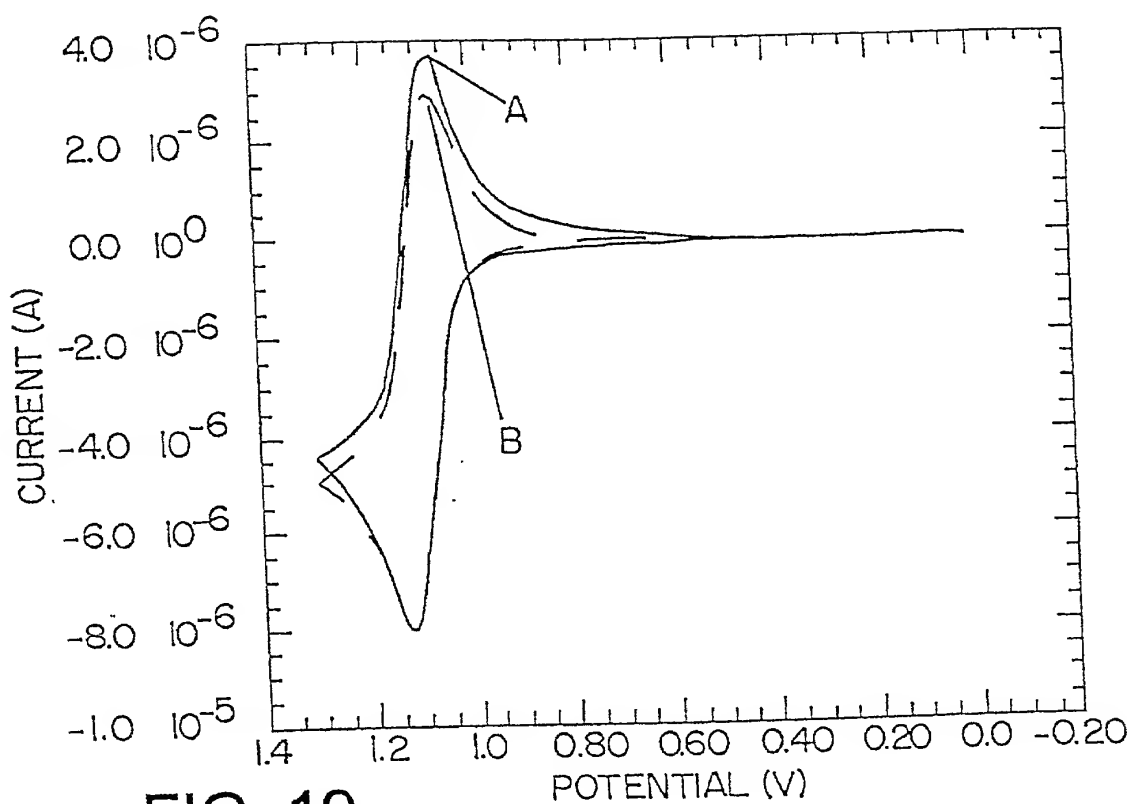


FIG. 19.

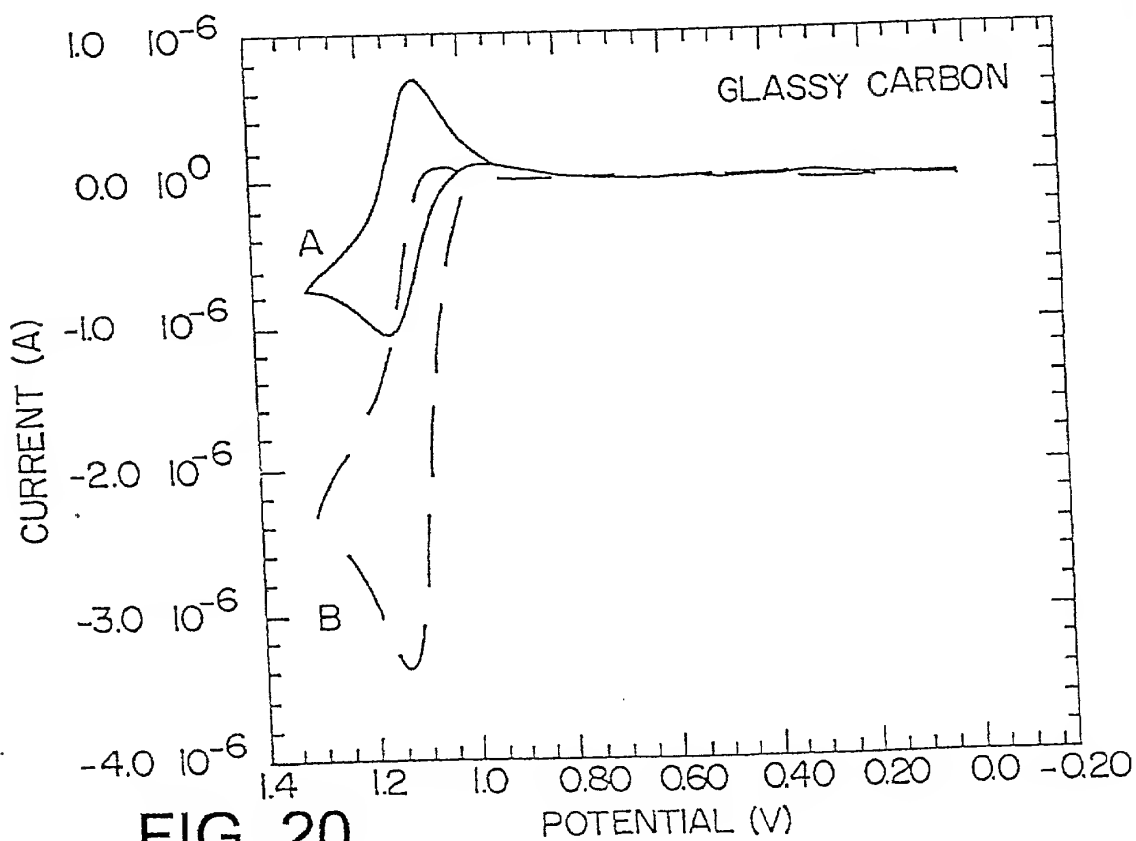


FIG. 20.